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ABSTRACT

William G. Perry, Jr.'s, ideas on the development of student writers were used as a frame of reference for a study of the discursive development of students enrolled in writing seminars at Skidmore College (New York). Perry posits that students execute a series of manœuvers in which they first try to assimilate new perspectives they are confronting to the dualistic framework that they bring with them to college. This process occupies the first three positions in his six-position scheme. In positions four, five, and six, students come to realize fully the multiplicity of experience, with position five being the turning point where students must completely modify their perceptions of reality. All papers were written upon one of two topics involving identical rhetorical situations. The 12 papers selected for analysis displayed these stages. In comparison to papers at the lower stages, the complexity of the papers at the higher stages increased geometrically in T-unit length, discourse structure, elaboration of argument, and sophistication of diction. The transition from stage four to stage five, from multiplicity to relativism, was most difficult for these writers. These results imply that (1) liberal arts education promotes development, (2) students must write in all classes, and (3) heuristic procedures that force students to new viewpoints are extremely valuable. (JL)

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The Development of Discursive Maturity in College Writers

by

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The Development of Discursive Maturity in College Writers

The introduction to this volume alludes to recent studies[1] suggesting that college freshman write poorly not because they make mechanical errors but because, in Susan Miller's words, they lack the ability "to compose original responses to generally interesting questions."[2] Charles Cooper and others believe that secondary education has given these students so little practice in writing persuasive or analytic discourse that they have internalized no "scheme" or "script" to "enable them to perceive, and thus fulfill, the requirements of well-formed persuasive discourse."[3] Miller, on the other hand, suspects that developmental factors are involved in students' inability to write competently when given an argumentative task. To test this hunch, she asked freshmen to compose an essay on one of psychologist Lawrence Kohlberg's "moral problems"--problems designed to measure a subject's level of ethical and moral (and thus, indirectly, cognitive) development on a scale ranging from "pre-conventional" to "post-conventional" reasoning. Miller concludes that her Ohio State freshmen functioned at a point midway between the conformity to traditional wisdom of Kohlberg's Stage Three and the "law-and-order" respect-for-authority orientation of Stage Four. In both these positions, students would be limited in their ability to question premises and to think analytically.[4]

As Miller readily admits, using Kohlberg's stages to assess writing development presents interpretive problems.[5] Yet researchers wishing to explore developmental factors in college-age writers must fall back upon some such scheme for lack of any other model. That is, although Piaget has chronicled the cognitive development of children and young adolescents,

and Walter Loban and James Britton have studied the development of language and writing abilities in the same age groups,[6] we have no paradigm for what constitutes the normal development of writing abilities in young adults; yet psychologists suggest that it is during young adulthood that some of the most complex analytic competencies develop.

Given these realities, Cooper's suggestion that college freshmen write poorly because they have not been taught to do otherwise is the parsimonious explanation. Yet I suspect that many college composition teachers have had experiences similar to that which Miller describes: namely, discovering that students who have been performing well on their comparatively simple writing tasks suddenly do abysmally on assignments requiring more abstraction, more deductive reasoning, or "analytic competency,"[7] than they have until now attempted. That is, students experience great difficulty in negotiating the move from concrete and immediate to more abstract and universal writing, a difficulty suggesting that they may be struggling to achieve a new stage of cognitive development. Further, Piaget himself has suggested that the acquisition of formal-operational thinking is by no means automatic.[8] Rather, if young adults are to develop it, they must interact with an environment that demands such reasoning just as a child, although possessing the potential for language, must be exposed to an environment in which language is used in order herself to develop it.

At least one researcher, William G. Perry, Jr., of Harvard, has conducted a logitudinal empirical study with results suggesting that the college experience may initiate new kinds of cognitive development, enabling students to "conceptualize about concepts," to engage in "meta-reasoning," and that this development occurs in a regular, identifiable sequence encompassing nine positions, or stages.[9] There are, of course,

individual variations in the time-table, but in general, entering college students perceive the world in dualistic terms of right-and-wrong, good-and-bad, and they assume that "Right Answers for everything exist in the Absolute, known to Authority, whose role is to mediate (teach) them"; the road to Knowledge and Goodness is paved with hard work and obedience.[10] Largely as a result of their exposure to the multiple perspectives of a liberal-arts education,[11] students move, during their four college years, to a stage in which they perceive "all knowledge and values (including authority's) as contextual and relativistic"; at the same time, they come to realize that the individual must, nevertheless, sort and evaluate information and attitudes, arriving at those positions that seem better rather than worse and making a commitment to them--in the full recognition that knowledge is contingent and all values relative.[12]

Insert Figure One about here

In the course of this development, students execute a series of maneuvers in which they first try to assimilate the new perspectives they are confronting to the dualistic framework that they bring with them to college. This process occupies the first three positions in the scheme. Positions Four, Five, and Six are pivotal, for in them students come fully to realize the multiplicity of experience and knowledge. Position Five marks a turning point, for in it students can no longer assimilate new experience to the old framework and must instead completely modify their perceptions of reality. After a period during which they in effect throw up their hands and say, "Everyone has a right

to his [sic] own opinions," students learn that they must think about their own thinking processes and that although everything is relative, not everything is equally valid.[13]

The evolution that Perry traces moves from simple and concrete to complex, abstract thinking, the ability to "conceptualize about concepts."[14] And, according to Perry, as the student confronts co-existing and contradictory realities and sees the need to reconcile them, she begins to develop Bruner's "analytic competency."[15] If Perry's scheme has validity, we should expect evidences of the same development to show up in the writing of college students, and if there is a similar identifiable sequence in the development of college students' writing abilities, this fact has profound implications for the sequences and methods with which we teach writing.

During the spring of 1978, I gathered papers from most of the students enrolled in freshman writing seminars at Skidmore College in New York and from a smaller group of more advanced students. Using Perry's scheme, which I find more cogent and more reliable than Kohlberg's, as a frame of reference, I will examine patterns of discursive development in these samples. For this purpose, I have selected twelve excerpts, each typical of the student's entire paper and also representative of numbers of student responses.

All papers were written upon one of two topics involving identical rhetorical situations. This topic asked students to imagine themselves speaking, as typical college students, on a panel at an adult educational forum on either abortion or marijuana. Writers were told that the panel included representatives from community agencies and groups, which varied according to the specific subject (for example, "a Catholic priest" appeared on the abortion panel). Writers were also instructed that their talks would be published in the local newspaper. Although hardly an original subject, this assignment turned out to be a Rorschach indicator of the level of students' writing and rhetorical abilities. In general, less skilled writers simply failed to perceive the assignment's cues and to respond to them. Many of these writers gave only token acknowledgment (or none at all) to the fact that they were writing for an audience, nor did their arguments really address the multiple perspectives of panel-members, which, in a real-life situation, they surely would have had to take into account. The more advanced student writers were more adept at perceiving and responding to these cues in ways that I will comment upon later.

The first writer I will discuss appears to be as close to Perry's Position One, Basic Duality, as any I discovered. This student, "John," perceives the world with undeviating moral imperatives. In Perry's terms, he is embedded within this dualistic frame of reference, one in which something is either right or wrong, the clear implication being that "we," who are identified with Absolute Truth,[16] are right and "they"--the others--are wrong. John makes sweeping statements:

> Once a life has been conceived, it should benefit to [sic] right to experience "living" and be given the chance to further the process of reproduction. This is the whole basis of our evolution. Thusly, abortion, whether committed under any circumstances, is sinful and unjust.[17]

John does not explain the basis for his judgment, nor does he qualify his position, for Absolute Truth admits of no qualification and concedes nothing.

Yet presumably one semester of college has had its effect, for this writer knows that he must consider contrary points of view and rebutt them even though they are "wrong." Thus he focuses on "the so-called accident case" and details some of the reasons why a pregnant woman might want to have an abortion. However, at this juncture the discursive process breaks down. Rather than answer the point he has raised, John simply dismisses this contrary position with, "Upon examining these reasons, the result is there's absolutely no substantial one for taking that innocent life. If she needs help, it's there for her." John tries to use the forms of discourse but does not grasp their substance. Using the structure of cause/effect ("upon examining . . . the result is"), he resorts to fiat rather than argument and deduction. Yet according to Perry, it is the practice of such logical structures, carried on, at first, mechanically and imperfectly, that eventually leads to genuine structural change in students' perceptual frameworks.[18]

The next writer, Rena, has probably progressed along the developmental scale as far as Perry's Position Two. Unlike John, who scarcely admits the existence of perspectives other than the right one (he refers to "the so-called accident case" [my italics]), Rena recognizes a

multiplicity of viewpoints: "Many people in the society have differing opinions about abortion. Some people feel it is okay. Pro-life people believe that a woman having an abortion is killing a human being." However, she regards positions other than her own as alien, in effect saying that she is right and that others, even the Authorities, are needlessly confused:

> . . . If a woman has been raped or sexually abused or has been the victim of incest the woman should be able to decide on an abortion or not. There should be no legal hassles.
>
> . . . I feel the woman who has control over her body should be able to make her own moral decision of whether to have an abortion or not. There shouldn't be all this hassle with all these other feelings when it is the woman's own decision. . . .

Like John, Rena relies upon flat assertion instead of reasoned argument. Yet again, such a position is appropriate to a world in which the truth is known and those who think differently can be dismissed. Despite its token acknowledgment of diverse points of view, the paper is oblivious to contexts other than the writer's. Of course, Rena is responding to the terms of the assignment: she is giving her perspective on the subject. But it is an indication of her academic and discursive innocence that she sees no need to buttress that perspective with supporting data, for it patently does not occur to her that anyone might question her opinion.

The next writer, Julie, has moved somewhat beyond this, for she has learned that she must give reasons for her opinions, a posture

characteristic of Perry's Position Four, in which students perceive that a multiplicity of viewpoints prevails and that one must therefore justify one's opinions. Thus Julie tells us why abortion "is beneficial to our society" although she does so at a very general level and without any supporting data:

> Abortion is beneficial to our society because it is a free opportunity for women to help lower the population explosion, prevent unwanted children from being born and prevent the unwanted consequences for the pregnant woman. Abortion was a great discovery that helped both men and women.
>
> Even though abortion has many good sides some people think that abortion is the murdering of babies. . . .

She employs not only a causal conjunction (<u>because</u>) but also a concessionary one (<u>even though</u>), this latter device revealing her perception that there is more than one side to at least this particular question.

Yet despite her attempt to utilize some structures of complex discourse, she still operates from within a fundamentally dualistic framework. Rather than genuinely respond to the contrary point that she has raised, she turns to simplistic slogans and to an absolute ("But in a country with freedom of choice like ours, there would be no freedom if we as women were told what we could and couldn't do with our bodies for everything we did") and finally resorts, like John and Rena, to edict: "Abortion isn't the murdering of babies, but the option of women to have a baby or not." Thus she aligns herself with the Absolute Right (freedom

of choice) against a misguided and wrong Authority (whoever would deny that freedom).[19]

In such papers, we see students struggling with the transition from one developmental position to the next. This writer still perceives a multiplicity of perspectives as alien intruders into a dualistic universe, and thus she cannot really enter into those perspectives in order to deal with them; they are simply too foreign to her. Yet for her they are of greater magnitude than they are for John and Rena, a magnitude requiring that holders of the Right Position provide explanations of and evidence for that position--if for no other reason than that the authorities who grade one's papers demand this kind of justification. Perry notes the irony that the most conformist students most easily acquire the structures of complex reasoning, for they dutifully practice them at the behest of their instructors, and this practice lays the foundation for the genuine structural transformation that later takes place.[20]

The next writer, Tom, has moved closer to relativism. To begin with, he realizes that in areas where more than one point of view may be legitimate, one's simple word is not enough; one must establish credibility. Hence his desire "to clearify [sic] that he has never used marijuana" (his is not a self-serving argument). Further, he knows that he must give reasons for his position, and he proceeds to do so, developing these reasons quite fully:

> I would like to clearify that I have never used marijuana during my 20 years of living. However, my position stands for the legalization of marijuana. . . . To begin with, today's society is one which is constantly discovering new

> drugs whether they help to prevent or cause illness. It seems that everything that we put in our system is harmful and will result in undesirable diseases. . . . I believe the marijuana users should also be warned; however, they should be able to make their own decisions.

However, at this point Tom slides back to an earlier, more simplistic position. Assuming what we might characterize as sophomoric cantankerousness, he adopts a stance similar to Julie's:

> The Declaration of Independence states that all people are created equally and that this is a free country. The question is, is it? . . . it seems that the government is dictating what we can and cannot do. Instead of hiring policemen to chase after pushers they should be working to capture criminals. . . .

Authorities are doing their job all wrong whereas Tom is on the side of The Right. Yet in his concluding statements, he again shows signs of approaching genuine multiplicity; he writes:

> As for myself, I have decided not to use marijuana and I am sure that many other people will be alongside of me. I do not feel that I have the right to decide whether the fellow next to me should or should not smoke marijuana. That decision should be his and only his.

In effect, Tom is assuming a stance characteristic of Perry's Position Four, in which, since the Absolute cannot be known, any opinion is as

good as any other, and one thus has no right to persuade others to one's way of thinking.

In the next paper, we see another student, Ken, struggling with this transition from dualism to multiplicity. Ken is genuinely aware of opposing arguments about marijuana use and can concede some validity to both viewpoints. Yet he cannot resolve these polarities and, throughout most of the paper, adopts a strategy common to beginning writers by sliding off into a long personal-narrative digression about a film on drugs which he saw when he was younger. In the final paragraph, though, he qualifies his assertions and then questions his questions, a process that in more mature writers eventually leads to a new synthesis:

> Marijuana has been successfully used in the treatment of certain diseases. Although it has also been proven "possibly to cause cancer," I have recently seen many signs on products that say "Warning: this product may be cancer causing." The problem with this statement is that people don't really know what is "cancer causing." In the marijuana it could be the pesticide used to keep the bugs away. Until more research is done, this statement is not a strong argument against the use of marijuana.

However, Ken is evidently too thoroughly adrift in multiplicity to head for the shore of resolution. Rather than conclude his paper, he merely stops, having never taken an identifiable position on the subject he has discussed.

Jean is also struggling with her perception of the world as a focus of various and competing perspectives. We can sense the angst in such statements as, "The subject of the legalization of marijuana is a very controversial subject. There are good points on both sides of the subject that make it difficult to decide on which way to go." Yet unable to sustain this uncertainty, Jean gives some unqualified reasons for her tentative position and then slides back to the reasoning of Position Three, in which Authorities simply don't as yet have the answers--and rather plaintively demands that they make up their minds and end all this controversy!

The next writer, Jack, shows us an embryonic stage of the structural revolution in which multiplicity is no longer just a specific case but becomes a relativism that reflects the nature of reality itself.[21] It is Perry's hypothesis that the structures of multiplicity assimilated to duality in the earlier positions now provide the structure for the new framework of relativism. Although he is far from comfortable with it, Jack recognizes such relativism: "It is obvious that there are going to be aura of opinions on the subject, and presumably the opinions will be well founded" (my italics). He acknowledges viewpoints and contexts other than his own:

> There is such diversity among the people of this country, as far as religion and culture are concerned. Certainly there are going to be contrasting opinions, but let us understand, and realize, the different points, policies, and dilemmas that are part of each section of people, religion, and government that we hear from.

Jack's paper displays a reasonableness of tone and a qualification of terms missing from the earlier samples; most interesting, although Jack is himself a Catholic, he maintains an objectivity and detachment towards the Catholic position on abortion, recognizing that such questions cannot be decided absolutely and that individuals must make their own choices:

> Since I am Catholic, I can only comment on their beliefs and feelings towards abortion. As far as I know the Catholics absolutely prohibit the operation for anyone associated with the religion. . . . The main argument for the Catholics, besides that it is a sin, is that the embryo is alive, thus making it murder. . . . The opposing argument is, if you have the operation within a certain period of time the embryo has no life, or brain. At any rate, the religion aspect of this issue will probably never be solved. . . . I feel that the operation should be left up to the discretion of the people harboring the idea of an abortion. . . .

Denise, a second-semester sophomore, shows us a substantial forward step developmentally, for she takes full responsibility for her own position, anchoring it not in some legalistic framework of external truth but in her own judgment and experience: "My reasoning behind this outlook stems from knowing people who are frequent marijuana users and also from limited exposure, but exposure nonetheless, to the wide variety of 'drugs' available." Her posture characterizes Perry's Stage Seven. We can also see developmental progress in Denise's freeing of herself from

adherence to authority: she does not hesitate to admit her own experience with the drug scene, something none of the younger writers has dared to do. Denise perceives gradations of better-worse, a complexity missing from earlier samples. She also plays the role that the assignment has given her more successfully than did the writers of earlier papers: she responds to the hypothetical situation--"I have been asked to state my views on marijuana and its usage and will try to do so as candidly as possible"--and she maintains a tone appropriate to a "representative" college student who wants to acquit herself well:

> It seems somewhat hypocritical to label the marijuana smoker a criminal yet promote and applaud the rising executive who is battling a serious drinking problem. There are so many ramifications concerning the drug scene that I just can't condone those that are legal and condemn those which are not, on that worn out, obsolete basis.
>
> The problem with <u>any</u> mood altering substance is not its use, it is the abuse of that substance. There is nothing more offensive, in my mind, about smoking an occasional joint than there is about having a cocktail before dinner. Smoking dope is a very pleasant way of unwinding and just relaxing. When the need to smoke becomes chronic or the time one chooses inappropriate, that is when marijuana becomes

> dangerous in those situations. My point boils down to the old saying, everything in moderation.

Denise has thought about her audience (middle-aged, middle class adults who would respect business executives and would see nothing wrong with cocktails before dinner) and has tried to relate her arguments to them. This ability accurately to project oneself into an imaginary situation in writing, to present ideas in ways that will be effective with one's audience, is virtually lacking in younger writers. Although some of the freshmen in my study tried to respond to the assignment's speaker-panel-audience situation, none of them was able to do so in any believable way. The ability to take someone else's perspective is a characteristic of maturity that younger writers simply do not yet possess.[22]

Don's paper also demonstrates a writer's ability to play a role. Even though Don personally opposes the legalizing of marijuana, he is able to detach himself from his own perspective, to assume the role of "average college student," and to present the viewpoint that he considers representative of such a student:

> . . . If you polled the average college student body, I think you would find the majority of the students in favor of legalizing marijuana, even those students who do not smoke themselves or have never even tried it. . . . Most college students feel that if alcohol and cigarettes can be legalized, then pot which in some way is less harmful because it has not been proven to <u>cause</u> lung cancer, only "black lung," and in most cases, better controlled than alcohol, why can't it be legalized also. . . .

> In my opinion all three should not be legalized because they do not do your body any long term good but if one is legalized all three should be legalized. . . .

With Betty's paper, composed at the end of this student writer's junior year, the awareness of context widens to include the historical as well as the contemporary: "Women of past ages knew ways to induce abortion, yet we often see their efforts restricted by religious and/or societal views, similar to arguments of today." Betty establishes the complexity of the issue and her own objectivity ("I have never been in the position of having to make the decision myself"). She takes a position (she favors abortion) but also qualifies it, emphasizing the individual's responsibility for her choices--an emphasis characteristic of Perry's Positions Seven and Eight, in which students accept the implications of commitment to beliefs and behavior in a relativistic world:[23]

> I don't advocate abortion as a means of birth control, not only because I feel it could be physically harmful if performed frequently, but also feel it is unnecessary if partners are taking responsibility for planning their parenthood. . . .

Sue's paper, written mid-way in her senior year, and Molly's, produced shortly after the writer's graduation, are the most discursively mature of the samples. Unlike their freshmen counterparts, Sue and Molly perceive the assignment's directive to "inform your audience of your views on the subject of marijuana [or abortion] and of your reasons for those views" as requiring a well-supported argument. If one has a view worth

stating, one has a stake in it that makes it worth arguing. Yet these are reasonable arguments that have about them the writers' recognitions, on the one hand, that the entire field of knowledge is relative and, on the other, that they can reason their way to a responsible position and express their identity by making such commitments.

Like Betty, Sue places the issue in a social and historical perspective that indicates her awareness that attitudes and mores change with time and circumstances:

> There was a time when only beatniks and hippies used the drug, people at the outer edges of society, but now marijuana is hardly the sensational or shocking drug that it was in the 40's or 50's, and its advocates include people from all walks of life. . . .

Sue emphasizes responsible choice, seeing the issue in terms of the decisions that one wants to make about one's life. She expresses her objections to marijuana use in a nonjudgmental way that even includes some humor, developing her points with considerable specificity:

> . . . It is an interesting experience to go into a room full of stoned people when one is completely straight. If the other people are in a fairly advanced phase of being high, they are quite disconcerting to watch. Typically, one sees several bodies slumped against the wall because "we're all feeling really mellow, man," and one hears such phrases as "Yeah," "You know," and "Wow." One probably will also see among the group several people frantically eating anything

they can lay their hands on. I don't know if there's any scientific basis for the occurrence of "munchies," but I know that this horrible side effect of pot smoking does, indeed, exist. Once when I was high, I devoured an entire bag of puffed rice, something that is completely tasteless, which I won't touch at all if I'm straight! I'm sure there are some girls that have attributed the "freshman ten" weight gain to attacks of the munchies, and as for me, if I'm going to gain weight I'd just as soon do it by eating food I enjoy and will remember eating.

My main plea to pot smokers is this, then: at least think about pot in terms of what it does to your valuable time, and to others' as well. My saying that I don't like pot is hardly going to stop either a potential or an established marijuana smoker; he or she obviously is the only one who can accomplish that. And perhaps my words may act as an incentive to stop using marijuana--not because the drug is illegal or addictive or makes the user a despicable person but because it causes such a waste of valuable time, never a justifiable crime!

Sue states her position, one in which she clearly has some personal investment, and urges her hearers to consider it even as she also recognizes that she probably cannot modify anyone's behavior with her words.

Molly, who takes a position opposite to Sue's, establishes a context, identifying herself as part of the community that she is addressing; this

posture represents the most mature stages on Perry's scale, stages in which students realize their own kinship with authority in the area of commitment. Molly utilizes the analogy between alcohol and marijuana to construct much of her argument, an analogy calculated to be effective with her audience and also one revealing her ability to relate one phenomenon to another in complex ways not possible for the sample's younger writers, who could only say, "Cigarettes are worse than marijuana, but <u>they</u> are legal":

> Marijuana use in this country, as most of us are aware, is rapidly approaching the staggering dimensions of our most widely used drug, alcohol. And, like alcohol, it becomes a problem when it is used in excess or for destructive purposes. In the cases of both marijuana and alcohol use, a mature, well-adjusted, fairly sensible individual will encounter no problems with the drug of his/her choice and will derive pleasure from moderate usage. . . . Because I have discovered no significant differences in behavior between the users of these two drugs [alcohol and marijuana], . . . I see no reason for penalizing marijuana users. Therefore, I advocate the legalization of marijuana 100%.

Molly also goes further than any of the other writers studied in anticipating and genuinely addressing the objections her audience might make to her argument. In the earlier papers, we see students retreating

from "letting in" or really considering opposite points of view: they allude to them only in order to topple them. By contrast, Molly concedes the validity of her hearers' possible concerns about marijuana's becoming accessible to children, and she deals with this question in a carefully reasoned way, admitting that some young people will get into trouble with the drug but asserting that most will, with maturity, achieve moderation:

> Perhaps some of you are afraid that legalization of this substance will be undesirable because it might encourage use by younger children. This comes to mind for it is an aspect of the problem which I have thought about carefully. Again, I stress the parallel behavior induced by pot and alcohol use alike. Youngsters will experiment with both these substances for a variety of reasons--it acts as a social lubricant, it is a status symbol, it is an assertion of independence. In most healthy cases, maturity curbs what may appear to be excessive use of either drug at an early age; the child comes to see the drug for what it really is. If anything, I think that legalization of marijuana may reduce its popularity among the very young. As it is now, part of the immature thrill to be had by using the drug is the knowledge that Mom and Dad would disapprove.
>
> . . .

Thus she talks about calculated risks that involve degrees of better and worse, an argument that does justice to the complexity of reality. Yet even though she concedes these risks, Molly takes a position and

argues for it vigorously. But, like Sue, she also adopts a reasonable and moderate tone that conveys her recognition of the issue's many facets.

If we compare T-unit length, discourse structure, elaboration of argument, and sophistication of diction between the early and late papers in this study, we find in the later papers a geometric increase in complexity, an increase that seems regularly to occur in an identifiable sequence: writers first construct "arguments" using flat, simplistic and unsupported assertions. They next add to those assertions reasons why they are so; that is, they justify them and in the process begin slightly to qualify them and to acknowledge, although not really to engage, other points of view. At the next stage of development, writers display a reasonably full recognition of multiple perspectives and some elaboration of these perspectives but lack the ability to deal with and resolve their implications. Students in this stage either simply state differing points of view or else fall back on earlier strategies: arbitrary statement or fiat, simplistic appeal to common wisdom or to some Absolute, and so on.

In terms of Perry's scheme, the transition from Stage Four to Stage Five, from multiplicity to relativism, appears to be the most difficult shift for these student writers. Once they have made it, their writing becomes more elaborated, more qualified, more concessionary, and yet at the same time more committed to a position. Seemingly they now have confidence in their ability to work through complex realities and make judgments about them. These more mature writers can also enter into points of view other than their own and fully engage them, and they develop the ability to shape their discourse to an audience's needs.

Now all of this has important implications for teachers of college writing. First, we need not sink into the Slough of Despond when our freshmen students do not write like mature adults, for we can reasonably hope that by the time they are seniors they will be considerably further along the road to discursive maturity. Nor, knowing their developmental limitations, should we make the mistake of giving freshmen and sophomores writing tasks that are more appropriate to graduate students. That way lies both failure and discouragement.

On the other hand, we cannot simply assume that the development of discursive maturity will occur automatically, much like the certain appearance of permanent after baby teeth. Perry's study suggests that it is the experience of a liberal arts education that produces this development[24]--and traditionally, a liberal arts curriculum stresses not only the presentation of diverse perspectives, of relativistic knowledge, but also the response to what is being learned in writing: through critical papers, essay exams, research papers, and so on. We badly need some comparative research to ascertain whether or not students studying technical and professional curricula rather than the liberal arts manifest the same development. Some work that I have done with older subjects (ages 25-75) suggests that discursive maturity does not coincide simply with chronological age--that it results, rather, from exposure to an environment that requires its development. College students who have solidified their growth in one stage of development cannot function at a level several stages beyond that position, but they can be helped to accelerate development into the next stage by being introduced to "calculated incongruities"--facts and ideas that seem contradictory; having to

reconcile and make sense of such conflicting realities will instigate movement towards a higher developmental level.[25] Knowing this, then, we need to design a college writing curriculum that will systematically confront students with tasks to develop their discursive and cognitive maturity.

If indeed such development can take place throughout the college years, and if Bruner is right that it is writing that fosters analytic competency,[26] it becomes crucial that students write in all their subject areas and not just in freshman composition. It may indicate something that the best of the older writers in my sample were all English majors and so had engaged in the extensive writing practice that helps develop discursive maturity. Thus I am really agreeing with Charles Cooper when he says that we need to teach students discourse schemes and require that they practice them. But I am also suggesting that these schemes must be sequenced to be appropriate to students' levels of development.

Finally, what are the concrete implications of this study for the teaching of writing? First, it suggests the immense value of requiring students to practice heuristic procedures that force them to view phenomena hierarchically and from multiple perspectives. Second, a developmental perspective dictates that we teach students discursive and syntactic structures appropriate to the discourse level just <u>above</u> the one they have achieved even though they will initially perform poorly at that level. For freshmen, this might mean requiring students to give reasons for their assertions and examples to illustrate those reasons, and then to develop these examples, in Christensen's terms, to a third or fourth level of generality.[27] At the high freshman or low sophomore level, we could require students accurately and fairly to summarize several opposing

points of view on a given topic, to give reasons for and examples of each of those viewpoints, and then to choose the perspective they find most compelling and give reasons for their choice. We could then ask them also to argue just the opposite perspective. Such sequencing of tasks could be designed for every stage of writing development up through the practice of mature discursive structures, such as the Toulmin model.[28] In the same way, we need to structure role-taking exercises and exercises in audience awareness and analysis that are appropriate to students' levels of development and the level just above.

Finally, a developmental perspective should remind us that our freshmen are not simply recalcitrant or stupid when they write in ways that seem to us puerile and simplistic. They really are struggling to achieve a new perspective on reality, and we need to acknowledge the difficulty of their struggle and support them as they engage in it, both assuring them that they will learn to jump these hurdles, encouraging them to continue to try, and challenging them by progressively setting those hurdles higher.

Notes

[1]Discussed on p. of the introduction to this volume. Also see Charles Cooper, Roger Cherry, Rita Gerber, Stefan Fleischer, and Barbara Copley, "Writing Abilities of Regularly-Admitted Freshman at SUNY/Buffalo" (unpublished study, State University of New York at Buffalo, 1980), pp. 82-83 and passim; Susan Miller, "Rhetorical Maturity: Definition and Development," in Reinventing the Rhetorical Tradition, ed. Aviva Freedman and Ian Pringle (Conway, AR: L&S Books and Canadian Council of Teachers of English, 1980).

[2]Miller, p. 120.

[3]Cooper, p. 59.

[4]Miller, pp. 123-124.

[5]John H. Flavell, Cognitive Development (Englewood Cliffs, NJ: Prentice Hall, 1977), pp. 142-143.

[6]See Barbel Inhelder and Jean Piaget, The Early Growth of Logic in the Child (New York: Norton, 1969) and The Growth of Logical Thinking from Childhood to Adolescence (New York: Basic Books, 1958); for a more complete bibliography of Piaget's work, see Mary Ann Spencer, Understanding Piaget, rev. ed. (New York: Harper & Row, 1980), pp. 238-241; also see James Britton, Tony Burgess, Nancy Martin, Alex McLeod, The Development of Writing Abilities, 11-18 (1975; rept. Urbana, Ill: NCTE, 1978); Walter Loban, Language Development: Kindergarten through Grade Twelve (Urbana, Ill: NCTE, 1976).

[7]See discussion in introduction to this volume, p. . Also see "Language as an Instrument of Thought," in Problems of Language and Learning, ed. Alan Davies (London: Heinemann, 1975), pp. 70-80.

[8]Flavell, p. 117.

[9]William Perry, Forms of Intellectual and Ethical Development in the College Years, A Scheme (New York: Holt, Rinehart & Winston, 1968), p. 33 and passim.

[10]Perry, p. 9; Perry notes that few students arrive at college in quite this stage of innocence. For most, although not all, this is a pre-college position.

[11]Perry defines a liberal art institution as "a pluralistic institution where the teaching of the procedures of relativistic thought is to a large extent deliberate"; p. 207.

[12]Perry, p. 3, pp. 9-10, and passim.

[13]Perry, pp. 95-176.

[14]Perry, p. 33.

[15]See the introduction to this volume, pp.

[16]I am following Perry's example in capitalizing terms referring to entities that students elevate to the status of absolutes.

[17]Except for regularizing spelling, I have left all errors in student papers intact; I have assigned fictitious names to student writers.

[18]Perry, pp. 207-212.

[19]Perry, pp. 91ff.

[20]Perry, pp. 95-96.

[21]Perry, pp. 207-212.

[22]See John Flavell, P. T. Botkin, C. L. Fry, Jr., J. W. Wright, and P. E. Jarvis, The Development of Role-Taking and Communication Skills in Children (New York: Wiley, 1968).

[23]Perry, p. 10.

[24]Perry, pp. 206-207.

[25]Perry, p. 21.

[26]See the introduction to this volume, pp.

[27]See Francis Christensen, "A Generative Rhetoric of the Sentence" and "A Generative Rhetoric of the Paragraph," in Notes Toward a New Rhetoric, Nine Essays for Teachers, 2nd. ed., with Bonniejean Christensen (New York: Harper & Row, 1978), pp. 23-44, 74-103.

[28]For a discussion of the Toulmin model of discourse, see Charles Kneupper, "Teaching Argument: an Introduction to the Toulmin Model," College Composition and Communications, 29 (October 1978), pp. 219-277.